

U.S. Patent Application No. 10/628,281
Amendment dated October 18, 2007
In Response to the Office Action Dated July 18, 2007

REMARKS

Continued examination and favorable reconsideration of the above-identified application are respectfully requested. Applicants have amended claims 1, 6-9, and 12, and canceled withdrawn claims 24-32 without prejudice or disclaimer. Support for amended claim 1 can be found, for example, at least at paragraph [050] of the present specification. New claim 33 has been added. Support for new claim 33 can be found at least in original claims 1, 2, and 3. Claim 12 has been amended to recite "purification column" instead of "purification chamber." Support for this amendment can be found at least in paragraphs [050] and [051] of the specification. The amendments place the application in better condition for expedited consideration and allowance.

TELEPHONE INTERVIEW

Applicant appreciates the courtesies extended by the Examiner to Applicant's representative during the telephone interview of September 10, 2007. During the interview, Applicant's representative proposed amending claim 1 to incorporate the limitations of claim 3. The Examiner agreed that such an amendment would overcome the prior art rejection against claim 1 and the claims dependent thereon. With respect to the Examiner's rejection of the claims under 35 U.S.C. § 112, first paragraph, Applicant's representative argued that the specification does provide enabling disclosure as to how the claimed methods can be performed incorporating the use of centripetal force. Applicant's representative directed the Examiner's attention to paragraph [025] of the specification, where it is stated that "centripetal force can be generated...by rotating the device about an axis of rotation while the device is mounted on a spinning platen." Applicant's representative also referred the Examiner to paragraphs [027], [040]-[044], and [047] of the

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specification, and Figure 2, where a rotatable platen and its use is further described. Applicant's representative also pointed out that applications incorporated by reference in the present application such as, for example, U.S. Patent Application No. 10/336,274, corresponding to U.S. Patent No. 7,198,759 B2, provide additional information as to how centripetal force can be used. In particular, Applicant's representative directed the Examiner's attention to Figures 33 through 40b of U.S. Patent No. 7,198,759 B2. The Examiner agreed that adequate disclosure is provided for the methods recited in claims 3 and 7. Applicant appreciates the Examiner's withdrawal of the rejection under 35 U.S.C. §112, first paragraph, as indicated in the Interview Summary dated September 11, 2007.

Rejection of Claims Under 35 U.S.C. §112

At page 2, item 1 of the Office Action, claims 3 and 7 have been rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. The Examiner states that the specification does not adequately disclose how to practice the methods encompassed by these claims. In particular, the Examiner states that it is unclear how the method of these claims is performed incorporating the use of centripetal force. For the reasons set-forth below, this rejection is respectfully traversed.

Applicant respectfully points out that paragraph [025] of the specification, discloses that "centripetal force can be generated...by rotating the device about an axis of rotation while the device is mounted on a spinning platen." Paragraphs [042]-[046] of the specification disclose a sample processing system, as depicted in Figure 2, that includes a platen that revolves around an axis of rotation. The specification discloses that a sample processing system can include one or

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more microfluidic devices disposed in a holder on a platen such that a radius or center line of the platen can be normal to a length or a width of the microfluidic device (paragraph [046]). The specification discloses that a fluid sample can be moved through the processing system by centripetal force (paragraph [043]). Applicant further notes that the applications incorporated by reference in the present application such as, U.S. Patent Application No. 10/336,274, corresponding to U.S. Patent No. 7,198,759 B2, provide additional information as to how centripetal force can be used. Figures 33 through 40b of U.S. Patent No. 7,198,759 B2, for example, depict a system including a plate that provides centripetal force. As such, Applicant respectfully submits that the specification provides sufficient support for the methods encompassed by claims 3 and 7. Applicant appreciates the Examiner's withdrawal of the rejection under 35 U.S.C. §112, first paragraph, as indicated in the Interview Summary dated September 11, 2007.

Rejection of the Claims Under 35 U.S.C. §112

At page 3 of the Office Action, claim 12 is rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner states that there is insufficient antecedent basis for the limitation "purification chamber" in line 1 of claim 12.

Applicant has amended claim 12, replacing "purification chamber" with "purification column." Support for this amendment can be found at least in paragraphs [050] and [051] of the specification. Reconsideration and withdrawal of the rejection are respectfully requested.

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Rejection of Claims Under 35 U.S.C. §102

At page 3 of the Office Action, claims 1, 2, 4-6, 8-18, and 23 are rejected under 35 U.S.C. §102(b) as being anticipated by Crowder, III (U.S. Patent No. 4,512,897). For the reasons set-forth below, this rejection is respectfully traversed.

Claim 1, and claims 2, 4-6, 8-18, and 23, which depend directly or indirectly from claim 1, now even more clearly recite that when the excess diluent is moved from the purification column into the output reservoir, the purification material becomes free of excess diluent. This feature is neither disclosed nor suggested by Crowder, III. Crowder, III describes at column 8, lines 11-41, that a suitable solvent can be circulated from a solvent reservoir (100) by a pump (101) through a column (104). *See*, FIG. 2 and column 8, lines 11-22. In FIG. 3 of Crowder, III, the embodiment described circulates a solvent from a reservoir (200) by a pump (201) through a column (205) and then to a waste reservoir (209). *See*, also, column 8, lines 30-41. In each of the embodiments shown in FIG. 2 and FIG. 3, solvent is moved through a column by forcing more solvent into the column. Even if such movement is considered moving excess diluent from a purification column, neither embodiment teaches or suggests providing the resultant column with material free of excess diluent or solvent. Accordingly, it is respectfully submitted that Crowder, III fails to disclose the claimed invention and cannot, therefore, anticipate the claimed invention.

Applicant respectfully submits that claim 1 distinguishes the claimed invention from the art of record and defines patentable subject matter. Reconsideration and withdrawal of the rejection are respectfully requested.

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Rejection of Claims Under 35 U.S.C. §103

At page 5 of the Office Action, claims 19-22 are rejected under 35 U.S.C. §103(a) as being unpatentable over Crowder, III (U.S. Patent No. 4,512,897). For the reasons set-forth below, this rejection is respectfully traversed.

Claims 19-22 depend from claim 1 which should be allowed for at least the reasons set forth above. Accordingly, Applicant respectfully submits that claims 19-22 should also be allowed. In view of the foregoing, reconsideration and withdrawal of the rejection are respectfully requested.

CONCLUSION

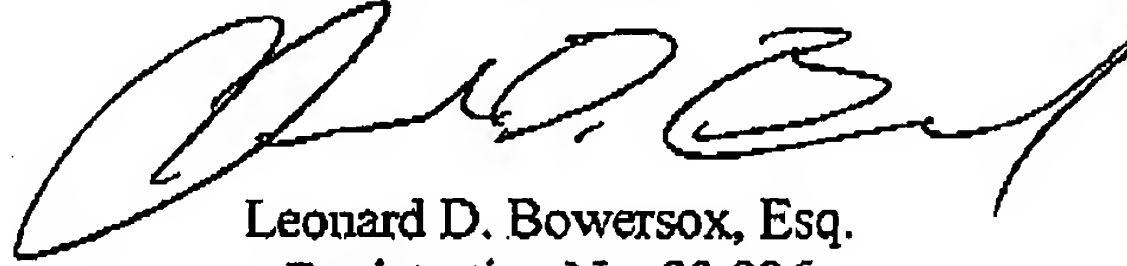
For at least the reasons discussed in detail above, Applicant submits that all pending claims are patentable over the applied references, whether those references are taken alone or in combination. Withdrawal of all rejections and timely issuance of a Notice of Allowance are respectfully requested.

Should the Examiner deem that any further action by Applicant or Applicant's undersigned representative is desirable and/or necessary, the Examiner is invited to telephone the undersigned at the number set forth below.

If there are any other fees due in connection with the filing of this response, please charge the fees to Deposit Account No. 50-0925. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read 'L. D. Bowersox', written over a horizontal line.

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